

ANNUAL REPORT  
OF THE  
**MEDICAL OFFICER OF HEALTH**  
OF THE  
**ST. ALBANS**  
**URBAN SANITARY DISTRICT**

For the Year 1904,

BY  
**JOHN MORISON,**

M.D., D.P.H., F.G.S., &c.,

**Medical Officer of Health,**

**&c., &c.**

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TO THE MAYOR AND CORPORATION OF THE  
CITY OF ST. ALBAN.

GENTLEMEN,—

I have the honour to present to you my Annual Report for the Year 1904.

The mean temperature for the year was  $49.8^{\circ}$ , which is considerably above the average of recent years. The winter was mild, the spring warm, the summer very warm, and the autumn somewhat cold. The warmest months were July and August, and the coldest was February. The highest temperature reached was  $87^{\circ}$  on August 4th, and the lowest  $20.5^{\circ}$  on November 24th. The rainfall for the year was 26.1 inches, which is slightly under the average. The hottest months were June and July, though there was also a good deal of rain in January, February, and December, and the driest months were April, March, and October, though September and November were also rather dry. The heaviest rainfall on any one day was on July 25th, when 1.7 inches of rain were registered.

During the year there were 247 deaths within the City of St. Alban, 117 of males and 130 of females. There were 37 deaths in the Abbey district, 89 in St. Peter's, 43 in St. Michael's, 13 in Sandridge, 11 in the St. Albans and Mid Herts Hospital, 53 in the Workhouse. and 1 in the Prison.

Taking the population of the City as estimated to the middle of 1904, to be 17,400, we have a death rate of 13.6 per thousand. But to find the true death rate, we have to take into consideration that 20 of the 53 deaths occurring in the Workhouse, 4 of the 11 deaths in the Hospital, and the 1 death which took place in the Prison, were of persons who did not belong to our City. These 25 cases have to be deducted. Then we have to add 2 cases of St. Albans people who died in the Herts County Asylum. If we deduct 25 from 247 and add 2 we get 224 as the corrected number of deaths and 12.8 as the true death rate.

This is a higher death rate than we have had for the last two years. In 1903 the total number of deaths was 199, and the gross death-rate 11.6; the corrected number of deaths 177, and the true death rate 10.4. In 1902 the total number of deaths was 206, the gross death rate 12.4; while the corrected number of deaths was 181, and the true death rate 10.9.

The mean total death rate however for the previous 10 years was 14.3, and the corrected death rate 12.6. We are still well under the average for Rural England and Wales, which in 1904 was 15.3.

There were 25 deaths in January, 24 in February, 19 in March, 25 in April, 15 in May, 17 in June, 18 in July, 22 in August, 18 in September, 26 in October, 24 in November, and 14 in December. The healthiest months were therefore December and May, while October, January, and April had the highest mortality.

Of the total deaths 39 were of infants under 1 year of age, giving us an infantile death rate of 2.2. In 1903, the deaths amongst infants were 28, and the infantile death rate 1.6. The number of deaths among children between 1 and 5 was 10 as against 13 in 1903. There were 106 deaths of persons 65 years old and upwards, as against 85 in the previous year. There was an increase in the deaths amongst infants, young persons, middle-aged, and old people, and a decrease in the deaths of children between 1 and 5, and 5 and 15.



There were 7 deaths from Pneumonia, and 28 from Bronchitis and other Respiratory diseases, as against 5 and 26 in 1903; 50 from diseases of the Heart, as against 44; 29 from diseases of the Nervous System, as against 23 in the previous year. There were 23 deaths from Phthisis and 10 from other Tubercular diseases, as against 11 from Phthisis and 9 from other Tubercular affections in 1903. There were 23 deaths from Cancer and Malignant disease, as against 18 in 1903.

There were 16 deaths from Infantile Diarrhœa, but no deaths from any of the other principal Zymotic diseases. The Zymotic death rate was therefore .92. In 1903 there were 10 deaths from Zymotic disease (Measles, Whooping Cough, Diphtheria, and Puerperal Septicaemia), and the Zymotic death rate was .59.

There was therefore an increase in the number of deaths due to all these different classes of disease.

There were 5 deaths attributed directly to Alcoholism.

There were 6 deaths due to Accident or Violence, including 2 Suicides, as against 12 in 1903.

What is the cause of the increase in our death rate? It is not very easy to give a definite answer to this question. I would point out however, that in 1904 there were 22 more deaths in Public Institutions than in the previous year, and that there were also 16 deaths from Infantile Diarrhœa, a disease from which the mortality in 1903 was nil. I think we may consider at any rate, that the meteorological conditions which obtained last year, namely, a greater tendency to extremes of temperature, the great warmth of the summer and the comparative dryness of the weather, were conditions which, though pleasanter, were more conducive to disease and death than the wet and equable seasons which we experienced in 1903.

In the month of March a man 27 years of age committed suicide by "cutting his throat." In April a man aged 34 committed suicide by "swallowing a poisonous dose of laudanum." In May a young man of 21 was killed by an "accidental fall from a cart." In June a man 38 years of age died of "shock consequent on being run over by a cart and receiving a compound comminuted fracture of the leg." In August a man of 44 died of "injuries received by an accidental fall from a train on the Midland Railway" near Radlett Station. And in

November an old woman of 78 died of "exhaustion consequent upon a fracture of the tibia accidentally received."

There were twelve Inquests during the year: Two in February, on an infant of 7 months, who died of "Broncho-pneumonia," and on a man aged 53, who died of "Heart Disease"; one in March, on an old man of 67, who died of "Bright's Disease"; one in April, on a young man of 28, who died of "Nephritis"; one in October, on a man aged 38, who died of "Heart Disease"; one in December, on a woman of 50, who died of "Chronic Alcoholism"; and the other six on the cases of death from Accident or Violence mentioned above.

There was one uncertified death: that of a female infant one hour old, who is stated to have died of "Inanition."

The death rates in the different divisions of the City were as follows:

Abbey District	...	...	11.3	per thousand
St. Peter's District	...	...	12.0	"
St. Michael's District	...	...	17.1	"
Sandridge District	...	...	14.7	"

During the past year there have been 374 births, 185 of males and 189 of females.

Of these births, 12 were illegitimate, and the proportion of illegitimate to legitimate births was therefore 32 as against 31.6 in 1903.

There were 84 births in the Abbey District, 197 in St. Peter's, 65 in St. Michael's, 23 in Sandridge, 4 in the Union Workhouse, and 1 in the Prison.

The birth rate for the year was 21.4. In 1903 and 1902 the birth rates were respectively 22.3 and 21.4.

The birth rates in the different divisions of the City were as follows:

Abbey District	...	...	18.4	per thousand
St. Peter's District	...	...	21.9	"
St. Michael's District	...	...	22.8	"
Sandridge District	...	...	22.5	"

The rate of mortality amongst children under 1 year of age per thousand registered births was 104.3, much higher than in 1903, when it was 71.2. But it is still well under the average for Rural England and Wales, which in 1904 was 125 per thousand.



## **Infectious Diseases.**

During the year 1904, 69 cases of Infectious Disease were notified to me, including 32 cases of Scarlet Fever, 7 of Diphtheria, 5 of Erysipelas, 1 of Enteric Fever, 23 of Chicken-pox, and 1 of Tuberculosis. Of the Scarlet Fever cases 18 were removed to the Sisters' Hospital, and there was also the case of a nurse occurring in the Hospital. In 1903 there were 96 cases in all notified, including 13 cases of Scarlet Fever and 9 of Diphtheria, while 10 of the Scarlet Fever cases were admitted to the Sisters' Hospital.

Once more I would call special attention to the fact that in many of the notifications I receive the age of the patient is omitted. This gives me a good deal of unnecessary trouble; and I should esteem it a favour if Medical Practitioners when filling up notifications would always be careful to state the ages of the patients.

### **Scarlet Fever.**

A certain number of cases of Scarlet Fever occurred throughout the whole year. The cases were most numerous in the Autumn, though the disease never really prevailed as a serious epidemic, and was of an exceedingly mild type. There were 2 cases in January, 1 in February, 2 in March, 1 in April, 2 in June, 3 in July, 2 in August, 2 in September, 4 in October, 9 in November, and 4 in December. There were 4 cases in the Abbey District, 24 in St. Peter's, 2 in St. Michael's, 1 in Sandridge, and 1 in the Sisters' Hospital. No deaths occurred from this disease.

### **Diphtheria.**

There were 7 sporadic cases of Diphtheria occurring in widely separated localities, and at different times of the year. There were 3 cases in the Abbey district, 3 in St. Peter's, and 1 in Sandridge. There was 1 case in April, 1 in May, 1 in June, 1 in July, 2 in August (both in the same house), and 1 in October. They were all isolated as well as practicable in their own homes. There were no deaths registered from this disease, but in the case of an infant whose death was registered as being due to "Acute Bronchitis," there is reason to believe that the true cause of death was Diphtheria.

### **Enteric Fever.**

One case of Enteric or Typhoid Fever was notified in January, that of a man aged 40, resident in St. Peter's District. This was without doubt an imported case.

### **Epidemic Diarrhœa.**

There was a great deal of Epidemic or Summer Diarrhœa last year, especially in August and September. There were 16 deaths from this cause: 1 in May, 1 in July, 9 in August, and 5 in September. There were 3 deaths in the Abbey District, 6 in St. Peter's, 6 in St. Michael's and 1 in Sandridge. The extremely hot weather which we experienced during the past summer is no doubt to some extent responsible for the mortality from this cause, for in the cool summers of 1902 and 1903 there were no deaths ascribed to this disease. Epidemic Diarrhœa, which prevails amongst infants in warm weather, especially amongst those brought up by hand, is essentially a filth disease, and is due to a specific micro-organism which flourishes in conditions more or less dirty and insanitary, and requires for its development weather sufficiently warm to raise the temperature of the ground to a certain height. Thus Epidemic Diarrhœa is pre-eminently a preventible disease. It can be prevented by strict attention to the cleanliness and sanitary condition of our dwellings, and by taking especial care that all milk which is consumed by our infants should be boiled or sterilised, and that all feeding bottles, tubes, and utensils in which the milk is received or stored, should be frequently washed or rinsed with boiling water, and kept most scrupulously clean. With the object more especially of preventing this disease, last summer I had some cards containing "Hints on the Feeding and Care of Infants" printed and distributed by means of the Registrars of Births, and the District Nurses, amongst mothers and other persons having the care of young children. I earnestly hope that this measure may be productive of good in the future, and do something to check the unnecessary sacrifice of young lives which goes on not only in this City, but throughout the length and breadth of the country.

### **Measles and Whooping Cough.**

Although there were a few cases of Measles and Whooping Cough during the year, no death is attributed to either of these diseases. Still, I feel it my duty



to recommend, you, as I have done on many former occasions, to include Measles, at any rate, among the diseases notifiable under the Infectious Diseases (Notification) Act. It is undoubtedly of the utmost importance that your Medical Officer should become aware of the earliest cases of an epidemic, in order that he may adopt suitable measures as far as possible to prevent the disease from spreading. For Measles is a disease which is not only the direct cause of considerable mortality amongst young children, but may, especially if attended by lung complications, prepare a way for the advent of other maladies, more especially Tubercle.

### **Influenza.**

There were a number of cases of Influenza in the beginning and again towards the end of the year, when it assumed indeed the character of an epidemic. Fortunately it has been on the whole of a mild type, and no deaths have been attributed to this disease.

### **Cancer.**

There were 23 deaths from Cancer and Malignant Disease during the year, as against 18 in 1903 and 14 in 1902. The death rate from Cancer was therefore 1.3, while in the year preceding it was 1.0.

### **Tuberculosis.**

I am sorry to have to report that there was a considerable increase in the number of deaths from Tubercle during the past year. There were 23 deaths from Phthisis and 10 from other Tubercular diseases, giving us a death rate from Phthisis of 1.3 and from Tubercle 1.89. The deaths from Phthisis in 1903 were 11, and from other Tubercular affections 9; in 1902 the numbers were respectively 12 and 12; in 1903 the death rate from Phthisis was 5, and from Tubercle 1.1; while in 1902 the Phthisical death rate was .7 and the Tubercular 1.3.

I have had only one notification of Tuberculosis during the past year. I would therefore most earnestly request all Medical Men practising in St. Albans to notify to me any case of Pulmonary Tuberculosis which may occur, at any rate amongst their poorer-class patients. It is specially important that your Medical Officer should become aware of the existence of cases of Phthisis in the smaller houses and cottages, in order that he may be able to impress upon the patient and his relatives the extreme importance of using all possible



means of disinfection. With the object of preventing the spread of this fatal disease, I have had some leaflets printed, entitled "Facts with regard to Tuberculosis or Pulmonary Consumption, and Precautions to be taken to prevent the spread of the Disease." These leaflets have been sent to the Medical Practitioners and District Nurses for distribution in appropriate cases. I hope that this may be productive of some benefit. It is most important that everyone should understand that Consumption is an infectious disease, and that special precautions are necessary to prevent the disease from spreading. And not the least important of these precautions is the thorough disinfection of the premises and bedding, after the removal or death of a Consumptive patient. The Registrar sends me immediate notice of any death from Phthisis, and I inform the Inspector, who calls at the house and offers disinfection, though, alas! in too many cases the relatives will not see the importance of this, and nothing is done. No Consumptive patient should sleep in the same room, and still less in the same bed as a healthy person. And it is very important that the expectoration should be carefully disinfected. Spitting in the streets or public places should be specially avoided. I may mention that our Bye-laws make spitting in public places an offence punishable by a severe fine. I earnestly trust that the efforts we are now making to check the ravages of Tubercle may bear good fruit.

### **The Sisters' Hospital.**

In the Sisters' Hospital there have been 40 patients under treatment during the year, all Scarlet Fever, there being 18 St. Albans Urban, 19 St. Albans Rural, and 2 Harpenden Urban cases, and in addition one of the nurses in the Hospital. I congratulate you on the purchase of a piece of land adjoining the Hospital, which will afford space for the extension of the buildings. It is really necessary that adequate provision should be made for the reception of cases of Diphtheria and Enteric Fever, and I trust that this will ere long be provided. I would suggest the erection of two small blocks, each containing male and female wards, for Diphtheria and Enteric respectively. Also it would be desirable to provide a small observation block which need not contain more than four beds in two wards, for the reception of doubtful cases. This would be a great advantage, as patients are often admitted to hospitals who are erroneously

diagnosed as suffering from Scarlet Fever or Diphtheria, and as we have to keep them in a few days to make absolutely certain of the facts, it is most important that they should be properly isolated, not only to prevent them from contracting disease themselves, but to prevent them from communicating whatever malady they may be suffering from to the other patients. We had two such cases last year, but as the Hospital was not full, we were able to place them in wards by themselves, and no harm resulted. I trust that arrangements will soon be made to carry out this necessary extension.

### **Small-Pox Hospital.**

I trust that in conjunction with the St. Albans Rural District and Harpenden, you will see your way this year to erect a Small-pox Hospital of some kind on the ground belonging to the Corporation at Redbourn. It is of the utmost importance that we should be prepared beforehand to deal with any cases of Small-pox which may occur. We may get a case of Small-pox at any moment, which, if not removed at once, may give rise to a serious epidemic. And we know from past experience how costly an epidemic of Small-pox is, and how absolutely disastrous an effect it may have on the trade and prosperity of the town. We know also that we can not rely on the continuance of the Clare Hall Hospital. It is therefore true wisdom and real economy to be prepared beforehand, even at considerable outlay, rather than run the risk of being taken unawares (which must undoubtedly happen if we defer the matter long), and being obliged to spend lavishly large sums of money, while incalculable damage is inflicted on the business interests and development of our City.

### **Water Supply.**

As you know, our water supply is derived from deep wells in the chalk, and during the past year we have had, as usual, a plentiful supply of pure and wholesome water. The only drawback to our water is its excessive hardness, but this, although objectionable to laundresses, and detrimental to boilers and hot-water pipes, does not at all interfere with its wholesomeness and potability.

### **Drainage and Sewerage.**

The drainage of the City is carried out in a thorough and efficient manner.



On its arrival at the Sewage Farm, the sewage is received into an open Septic Tank, where the micro-organisms present in it increase and multiply, and by their agency a great deal of the solid matter is rendered soluble and is dissolved. Thence it is conducted successively through two sets of Bacteria beds, one set containing gravel comparatively coarse and the other set filled with fine gravel. In these beds by bacterial agency the organic matter and ammonia which the sewage contains is oxidised, and the resulting effluent is tolerably pure. Nevertheless it is conducted over the surface of the land and filtered through the soil before it is allowed to leave the Farm, so that we have really a very pure effluent. All offensive smell has been reduced to a minimum.

### **Ashes and Refuse.**

A daily collection of ashes and refuse is now made in some of the central parts of the town. A daily collection should however be made in all the business quarters, as well as more particularly in the poorer neighbourhoods such as Sopwell Lane, Watson's Row, etc., where the accommodation for storing the refuse is often very limited. And I consider that ashes and refuse should be collected from every house within the City at least twice a week. During the past year I have had complaints that in some cases an interval of two or three weeks elapsed between the visits of the dust-carts. This certainly ought not to be, as the fermentation and putrefication of organic matter in the neighbourhood of houses is a fruitful source of disease. And dust-carts with fixed covers ought to be provided, in order as far as possible to prevent the diffusion through the air of organic matter, which might possibly contain infection.

In connection with this subject I think you ought soon to consider the question whether it be not desirable at no distant date to erect a Destructor, as has been done in some neighbouring towns. We possess a suitable site in the neighbourhood of the Sisters' Hospital. This is at any rate a matter for serious consideration.

### **Common Lodging Houses.**

I have visited all the Common Lodging Houses within the City, and have found them to be all fairly clean and well kept. From the information I have received they do not appear to be overcrowded. In two instances the usual cards containing the cubic space and number of persons allowed to sleep in each room were not affixed



to the walls, but on pointing out the omission to the proprietors they agreed to remedy it. An additional Lodging House has been registered in French Row, after various alterations which we insisted upon were made. Amongst these alterations was the provision of an additional w.c., and an outside emergency staircase for escape in case of fire.

### **Slaughter Houses.**

I have visited all the Slaughterhouses within the City, and have to report that they are on the whole as clean and well kept as their structure and situation will permit. In one instance however there was no proper provision for the reception of the manure. Notice has been given to have this defect remedied. I must regard the continual existence of many of these Slaughterhouses, situated as they are in close proximity to dwelling-houses, as constituting a danger to the community. It is almost impossible to keep a Slaughter-house which is closely surrounded by houses in such a condition that it will not sometimes be a nuisance and a source of danger to the health of the neighbours. Therefore I must again recommend you to consider whether it be not desirable, in the best interests of the City, to erect a public Abattoir in some suitable locality, which would be under the direct supervision of your own Officers.

### **Dairies and Cowsheds.**

The Dairies and Cowsheds within the City have all been inspected, and their condition as regards air-space, ventilation, cleanliness, drainage, etc., has been found satisfactory. The Veterinary Inspector has frequently inspected the cows, and has been careful to order the isolation of any cows suffering from Tuberculosis of the udder, and has prohibited the sale of their milk.

### **Bakehouses.**

I have visited all the bakehouses within the City, and have found them in a satisfactory condition.

There were eleven underground bakehouses in existence in 1903. As a result of the action taken by the Council under the Factory and Workshops Act, 1901, six have been closed, and five were to be altered to meet the requirements of the Council, in order to obtain certificates of suitability. In point of fact only four certificates were issued. As regards the fifth case, the shop changed hands, and the bakehouse is no longer used.

These certificates were given after the Council was satisfied that the bakehouses were suitable for the purpose of baking bread as regards their construction, light, ventilation, etc. A copy of the requirements of the Council is appended to this Report.

### **Factories and Workshops.**

Under the Factories and Workshops Act, 1901, I have visited all the Factories and Workshops within the City.

As regards the Factories (48 in all) in which mechanical power is employed, I have to report that they are all very fairly clean and well ventilated, and that the air-space allowed is sufficient. In two cases no sanitary accommodation was provided. Notices have been sent to the proprietors, and they have undertaken to have these defects remedied. The provisions for escape in case of fire appear to be sufficient.

With regard to Workshops and Work-places, which number 121 in all, I found them all with one exception fairly clean, not over-crowded, and sufficiently ventilated. In five cases however no sanitary accommodation was provided. Notices have been sent to the proprietors in these cases, and proper sanitary conveniences will be supplied. In four other instances the accommodation was either unsuitable or defective. Notices were also sent in these cases, and the defects will immediately be remedied. In three other Workshops where persons of both sexes were employed, no separate accommodation was provided. I spoke to the proprietor of one of these establishments, and after some little consideration he agreed to put up another w.c. In the other two cases notices were issued with a satisfactory result. I may mention that the Public Health Amendment Act, 1890, including Section 22, has been adopted by the Council, and that the standard of sufficiency and suitability of sanitary accommodation for persons employed in Factories and Workshops which is enforced is one w.c. to every 25 or at most 30 persons.

I would call the attention of employers of out-workers to the necessity of sending lists of such out-workers, giving their names and addresses, to me or to the Sanitary Inspector. The Act requires this to be done twice a year, say in January and July. I have received 15 lists of out-workers containing 207 names.

### **Public Baths.**

I am pleased to note that there is at last a prospect of Public Baths being provided for the City. Some provision of this kind is most desirable, and will materially promote the health and well-being of the community.

### **Byelaws and Regulations.**

There are excellent Bye-laws and Regulations in force in the City of St. Albans, with respect to the Good rule and Government of the City, New Streets and Buildings, Nuisances, Common Lodging Houses, Slaughter Houses, Dairies, Cowsheds and Milkshops (dating June 1903), Clarence Park and Recreation Ground, etc.

I have made systematic inspections of all the various parts of the City at different times throughout the year, but have found nothing, except what is mentioned above, that seems to call for special comment.

I beg to thank his Worship the Mayor and all the Members of the Council for their uniform courtesy and consideration.

My thanks are also due to the Town Clerk, the Inspector of Nuisances, the Surveyor, and all the other Officials for their valuable assistance and co-operation.

I am, Gentlemen,

Your most obedient Servant,

JOHN MORISON, M.D., D.P.H.,

Medical Officer of Health.

February 6th, 1905.





## **Regulations as to the Construction of Underground Bakehouses.**

1. Every underground bakehouse shall be not less than 8 feet in height, and shall have a cubic capacity, excluding the oven, of not less than 1,300 feet, and shall be maintained and kept clean and in good order, repair and condition.

2. The floor of every such bakehouse shall be constructed of hard, smooth, durable and impervious material, and shall be so maintained.

3. The walls of every such bakehouse shall be constructed of material, hard, smooth, durable and impervious to damp, and shall be so maintained.

4. The ceiling of every such bakehouse shall be, and shall be maintained, even, impermeable to dust and damp, and durable.

5. Every underground bakehouse shall be approached by a suitable staircase, adequately lighted and ventilated. No outside staircase shall terminate within an underground bakehouse.

6. Any opening from an underground bakehouse into the shop above must be so covered as to prevent the entrance of dust.

## **As to the Lighting of Underground Bakehouses.**

7. Every underground bakehouse shall be adequately lighted by daylight throughout.

## **As to the Ventilation of Underground Bakehouses.**

8. Every underground bakehouse shall be adequately ventilated to the satisfaction of the Medical Officer of Health.

## **General Requirements.**

9. No flour shall be stored, and no coal, coke, or other materials shall be kept in any such bakehouse.

10. Every flour store shall comply with the same conditions as regards cleanliness and general sanitation as the bakehouse itself.

11. Any underground room not entirely separated from the bakehouse must be protected against the entrance of ground air, and must be properly ventilated and kept clean.

12. There shall be no opening into the underground bakehouse of any kind which may admit dust from the street, yard, or ground adjoining.

13. Conveniences for personal ablution, and a place for the deposit of wearing apparel, shall be provided in suitable positions outside the bakehouse, and free access shall be provided to suitable sanitary conveniences suitably situated.

14. No underground bakehouse shall be in communication with a washhouse, or any room, cellar, or area containing objectionable material.

15. All troughs and tables used in an underground bakehouse shall be provided with strong castors, so as to admit of easy movement and more effectual cleansing.

16. Before making any alterations with a view to meeting these requirements, the owner or occupier of an underground bakehouse shall submit to the Town Council a specification and plans of the alterations proposed to be made.

In the event of the Town Council granting a Certificate in pursuance of Section 101, Sub-section (2) of the Factory and Workshop Act, 1901, such Certificate will in the first instance be for one year only, but may be renewed.

By Order,

A. H. DEBENHAM,

Town Clerk.

June, 1903.

